



Claims

1. Arrangement of optical elements in projection systems, preferably in projection modules having a changeable focal width, such as for the imaging of tilt mirror matrices or for the imaging of reflective, i.e. transmissive, LCDs, whereby the optical elements (2, 3) fixed in place in mechanical holders (6, 7) are arranged so that they can be positioned on a common optical axis (5) relative to one another, **characterized in that** for the purpose of accommodating the mounted optical elements (2, 3, 4), a common carrier element (1) is provided.
2. Arrangement of optical elements in projection systems according to Claim 1, characterized in that the main carrier element (1) is an integral part of the overall device (chassis).
3. Arrangement of optical elements in projection systems according to Claims 1 and 2, characterized in that the exposure device is arranged directly in the main carrier element.
4. Arrangement of optical elements in projection systems according to Claim 1, characterized in that the main carrier element (1) is a unit that can be released from the overall device.
5. Arrangement of optical elements in projection systems according to Claims 1 to 4, characterized in that a focusing element (2) and a zoom element (3) are arranged to be axially displaceable in the main carrier element (1).
6. Arrangement of optical elements in projection systems according to Claim 5, characterized in that for the purpose of the axial displacement of the focusing element (2) and/or the zoom element (3) pairs of threads are provided between the holders (6, 7) of the adjustment elements (2, 3) and the main carrier element (1), whereby rotational movements of the adjustment elements (2, 3) are converted to translational movements.
7. Arrangement of optical elements in projection systems according to Claim 5, characterized in that the displacement mechanisms for the axial adjustment of the focusing element (2) and of the zoom element (3) are separate from one another.

8. Arrangement of optical elements in projection systems according to Claim 5, characterized in that for the purpose of the axial displacement of the adjustment elements (2, 3) the rotational movements of the focusing element (2) and/or of the zoom element (3) can be controlled by way of guide cams.
- 5
9. Arrangement of optical elements in projection systems according to Claim 5, characterized in that, in order to introduce the translational axial movements of the focusing element (2) and/or of the zoom element (3), straight-line guides are provided between the adjustment elements (2, 3) and the main carrier element (1).
- 10
10. Arrangement of optical elements in projection systems according to Claims 4 and 5, characterized in that the focusing element (2) or the zoom element (3) is directly connected with the main carrier element (1), whereby for the purpose of the axial adjustment movement a translational movement of the main carrier element (1) is made, while the adjustment element (2 or 3) that is not in connection with the main carrier element, in each instance, remains unchanged in its axial position.
- 15
11. Arrangement of optical elements in projection systems according to Claims 1 and 2, characterized in that an image-producing device (4) is integrated into the main carrier element (1).
- 20